Synology®

Synology DiskStation DS111

Feature-rich 1-bay NAS Server for Workgroups and Offices

Synology DiskStation DS111 is an affordable and full-featured 1-bay NAS server designed to increase productivity for business workgroups. Cross platform file sharing, rich office applications, data backup and security are easily achieved in a flexible solution. Running on DiskStation Manager 3.0 (DSM 3.0) operating system, it delivers ease of use and variety of features.

Highlights

- Optimal Price/Performance Ratio
- Windows+Mac+Linux Cross Platform File Sharing
- Rich Office Applications
- Effortless File Backup
- Peace of Mind with AES 256-bit Share-level encryption

Optimal Price/Performance Ratio

The Synology DS111 delivers an average 105.59 MB/sec reading speed in a Windows environment, and 60.71 MB/sec writing. The Synology DS111 provides a reliable solution for data sharing with an easy to use interface, and comprehensive office applications, including a complete backup solution making it one of the best values in 1-bay NAS devices available today.

Easy Setup and Management

Synology DSM 3.0 operating system offers intuitive and easy-to-use web experience. For users who are limited on time and not familiar with configuring complicated routers, the Synology EZ-Internet Wizard simplifies the process of setting up access to the Synology DS111 from the Internet. The EZ-Internet Wizard steps through all of the settings including firewall settings, port-forwarding, PPPoE setup and DDNS registration.

The multi-tasking web UI on DSM 3.0 lets users to run multiple applications simultaneously on one tab browser and switch between them instantly. User Home feature makes creating private shared folders for a large number of users an easy task as it minimizes the steps and time for the administrator to create private shared folders. Sub-folder privilege settings further extend the flexibility to allocate permissions for different workgroups. All of these features are performed in a web browser, akin to a full desktop experience.

Windows+Mac+Linux Cross Platform File Sharing

Synology DS111 is designed for data storage and sharing among Windows, Mac, and Linux. Seamless file sharing across different operation systems is an effortless process. Windows ADS integration allows the Synology DS111 to quickly and easily fit into an existing network environment with no need to recreate user accounts on the Synology DS111.

Peace of Mind with Data Encryption

Data protection is an important matter for business of all sizes. Synology DS111 comes with share-level AES 256-bit encryption to aid in the prevention of unauthorized access attempts to the hard drives.

Rich Office Applications

Synology Mail Station add-on provides a one step installation and enables Synology DS111 to be a mail server that supports Outlook-like Web mail, SMTP, POP3, and IMAP.

Synology Web Station with Virtual Host option allows users to host up to 30 websites on one single Synology DS111. The built-in PHP+MySQL provides the ability to create interactive websites without complicated settings.

Synology DS111 supports two USB printers simultaneously as a Print Server, and the Add Printer Wizard simplifies setup process with a wizard.

Effortless File Backup

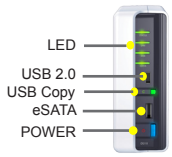
The Synology DS111 offers a centralized backup target to consolidate fragmented and unstructured data across a network. PC Users can back up their data to the Synology DS111 using the free Synology Data Replicator software, while Mac OS X users enjoy native Apple® Time Machine integration. A web-based backup wizard is provided for backing up data in the Synology DS111 to another Synology DiskStation or any rsync server via an encrypted transmission, or to an external hard drive via USB or eSATA connection. In addition, backing up to the cloud using Amazon® S3 service is also supported.

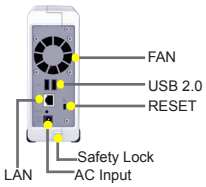
Eco Friendly

Synology DiskStation is designed and developed perpetually with the concept of energy saving. Compared with average PC counterparts, Synology DS111 consumes a relatively low amount of power in operation (18.7W) and has the HDDs hibernate when not in use (7.7W).This not only helps to save energy but also extends the lifespan of the hard disk. Unique Scheduled Power On/Off feature, and the smart fan design effectively cools down the system with minimum power consumption, yet keeps the system quiet on operation.

Finally, all Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology recognizes its responsibility as a global citizen and is continually working to reduce the environmental impact of the products we create.

CONNECTIONS & BUTTONS





Technical Specifications

Hardware

- CPU Frequency: 1.6GHz
- Memory Bus: 16bit@DDR1066
- Memory: 256MB
- Internal HDD[1]: 1X 3.5" SATA(II) or 1X 2.5" SATA/SSD using Synology Disk Holder Type C
- Max Internal Capacity: 2TB
- Size (HxWxD): 160mm X 63mm X 218mm
- External HDD Interface: USB 2.0 port X3 ESATA port x1
- Weight: 0.81Kg
- LAN: Gigabit X1
- Wireless Support[2]
- Hardware Encryption Engine
- Fan: X1(50x50x20mm)
- Power Recovery
- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Power Consumption[3]: 18.7W (Access); 7.7W (HDD Hibernation)
- Operating Temperature: 5°C to 35°C (40°F to 95°F)
- Storage Temperature: -10°C to 70°C (15°F to 155°F)
- Relative Humidity: 5% to 95%RH
- Maximum Operating Altitude: 10,000 feet
- Certification: FCC Class B, CE Class B, BSMI Class B

Applications

File Browser / File Station

FTP Server
- Bandwidth Control
- Custom FTP Passive Port Range
- Anonymous FTP
- Transfer Log

Web Station
- Virtual Host (up to 30 websites)
- PHP/MySQL
- Alternative HTTP Error Page
- 3rd-Party Applications Support

Surveillance Station
- Default IP cam #: 1
- MAX IP cam # (licenses required): 8[4]

Photo Station
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Video Format[5] : 3G2, 3GP, ASF, AVI, DAT, DivX, FLV, M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3

Download Station
- Supported Download Protocols: BT/HTTP/FTP/NZB/eMule
- Custom BitTorrent Port Range
- BitTorrent / eMule Bandwidth Control

Audio Station
- Supported Audio Format: (USB Mode) AAC, FLAC, M4A, MP3, Ogg Vorbis, WMA, WMA VBR; (Streaming Mode) MP3, M4A, M4B
- Supported Playlist Format: M3U, WPL
- Internet Radio: SHOUTcast, Radioio

DLNA/UPnP Media Server
- DLNA Certified
- PS3/Xbox 360 Support
- Supported Audio Format: AAC, FLAC, M4A, MP3, Ogg, Vorbis, PCM, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- Supported Video Format: 3GP, 3G2, ASF, AVI, DAT, DivX,DVR-MS, ISO, M2T, M2TS, M4V, MKV, MP4, MPEG1, MPEG2, MPEG4, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, XviD, RV30, RV40, AC3, AMR, WMA3
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, ICO, PNG, PSD, TIF (tiff), UFO, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Subtitles Format: srt, psb, smi, ass, ssa, sub, idx, ifo

iTunes Server
- Supported Audio Format[6] : MP3, M4A, M4P, WAV, AIF
- Supported Video Format: M4V, MOV, MP4
- Supported Playlist Format: M3U, WPL

Print Server[7]
- Max Printer #: 2
- Printing Protocols: LPR, CIFS, AppleTalk

Synology Packages
- Mail Station
- Squeezebox Server
- Webalizer
- phpMyAdmin
- Time Backup

iPhone and Android Applications
- DS photo+
- DS audio
- DS cam

General Specifications

Networking Protocols
- CIFS, AFP, FTP, iSCSI, Telnet, SSH, NFS, WebDAV, SNMP

File System
- EXT4
- EXT3
- FAT32 (External Disk Only)[8]
- NTFS (External Disk Only)[9]

Volume Management
- Max iSCSI Target / LUN: 10 / 10
- Volume Type: Basic

File Sharing Capability
- Max User Account: 2048
- Max Group: 256
- Max Shared Folder: 256
- Max Concurrent Connections (SAMBA, FTP, AFP): 128

Windows Access Control List (ACL) Support

Windows ADS Domain Integration
- Domain Users login via Samba/AFP/FTP/File Station

Backup Solutions
- Network Backup
- Local Backup
- Desktop Backup (using Synology Data Replicator 3 or Apple Time Machine backup application)
- 3rd-Party Backup Support

Security
- FTP over SSL/TLS
- IP Auto-Block
- Firewall
- Encrypted Network Backup over Rsync
- HTTPS Connection

Management
- DSM Upgrade
- Email Notification
- SMS Notification
- Customized User Quota
- DDNS Support
- PPPoE
- Resource Monitor
- UPS Management
- Scheduled Power On/Off
- Custom Management UI HTTP/HTTPS Ports

HDD Management
- HDD Hibernation
- S.M.A.R.T.
- Dynamic Bad Sector Mapping

Utilities
- Synology Assistant
- Synology Download Redirector
- Synology Data Replicator

Supported Browsers
- Chrome 5
- Internet Explorer 7 and 8
- Firefox 3.5 and 3.6
- Safari 4 and 5 (Mac)

Supported Clients
- Windows 2000 onward
- Mac OS X 10.3 onward
- Ubuntu 9.04 onward

Supported Mobile Devices (Photo Station, File Station)
- iPhone OS 2.2.1 onward
- Android OS 1.5 onward
- Windows Mobile (IE Mobile or Opera 9.0 onward)
- Symbian OS 9.1, S60 3rd Edition onward

Language
- Czech, Danish, Dutch, English, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese Brazil, Portuguese European, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish

Environment and Packaging

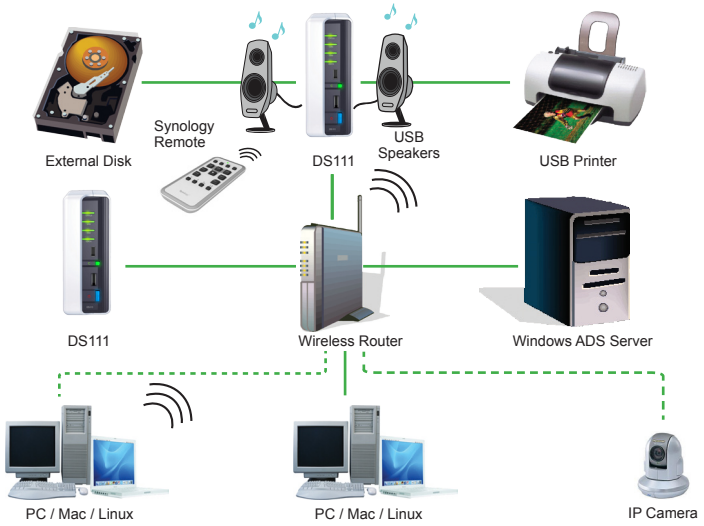
Environment
- RoHS Compliant

Package Content
- DS111 Main Unit
- Installation DVD
- Welcome Note
- Assembling Kit
- AC Power Adaptor
- AC Power Cord
- 2M RJ-45 LAN Cable

Optional Accessories
- Synology Remote
- Camera License Pack

1. Hard drive not included.
2. Wireless dongles not included. Please check http://www.synology.com/ for supported wireless dongles.
3. Measured with 2 Seagate 750GB ST3750640NS hard drive. The figures could vary on different environments.
4. 1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.
5. User can click and download the following video formats: RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3, but not able to play it in Photo Station as compressed Flash video.
6. The music in WAV and AIF format can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.
7. For Mac users, DS111 supports PostScript USB printers only.
8. Primary partition only.
9. Primary partition only.

Networking



SYNOLOGY INC.

Founded in 2000, Synology is a young and energetic company dedicated to developing high-performance, reliable, versatile, and environmentally-friendly Network Attached Storage (NAS) products. Our goal is to deliver user-friendly solutions and solid customer service to satisfy the needs of businesses, home offices, individual users and families.

Copyright © 2010, Synology Inc. All rights reserved. Synology, the Synology logo are trademarks or registered trademarks of Synology Inc. Other product and company names mentioned herein may be trademarks of their respective companies. Synology may make changes to specification and product descriptions at anytime, without notice.
Printed in Taiwan,
DS111-2010-ENU-REV002

http://www.synology.com

Headquarters
Synology Inc.
3F-3, No. 106, Chang An W. Rd., Taipei, Taiwan
Tel: +886 2 2552 1814 Fax: +886 2 2552 1824

North & South America
Synology America Corp.
2899 152nd Ave NE, Redmond, WA 98052. USA
Tel: +1 425 818 1587

Synology UK Ltd.
Davy Avenue, Knowlhill,
Milton Keynes, Bucks,
MK5 8PB, UK
Tel: +44 01908 673 709